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(54) GLUCOSE DEHYDROGENASE HAVING PQQ AS PROSTHETIC GROUP AND ITS PRODUCTION

(57)Abstract:

PROBLEM TO BE SOLVED: To provide a new glucose dehydrogenase producible in a mass at a low cost by gene recombination technique and useful for the determination of blood sugar level, etc.

SOLUTION: This enzyme is (A) a protein composed of the amino acid sequence described by formula or (B) a protein composed of the amino acid sequence of formula provided that one or several amino acid sequences are deleted, substituted or added and having glucose dehydrogenase activity. The glucose dehydrogenase having PQQ as prosthetic group is produced by culturing a PQQ-producing transformed microorganism obtained by transforming a microorganism such as Pseudomonas aeruginosa with a recombinant vector integrated with a DNA fragment containing a gene coding for the enzyme.

Met Asp Lys His Leu Leu Ala Lys Ile Thr Leu Lys Gly Ala Ser Gln
1 5 10 15
Leu Phe Thr Phe His Thr Ala Phe Ala Asp Ile Pro Leu Thr Pro Ala
20 25 30
Thr Asp Thr Ala Gly Ser Val Glu Lys Asn Asp Gly Ser Val Thr His
35 40 45
Trp Leu Gly Asn Thr Gly Ser Leu Thr Lys Phe Thr Tyr Asn Gly Lys
50 55 60 65 70

LEGAL STATUS

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